

PETRCV, N. V.

Problems of surgical dentology. Izv. ..., perer. Leningrad, S.S. ...
usovershenstv vniiz vrachel im. G. M. Kirova, 1967, 87 s.

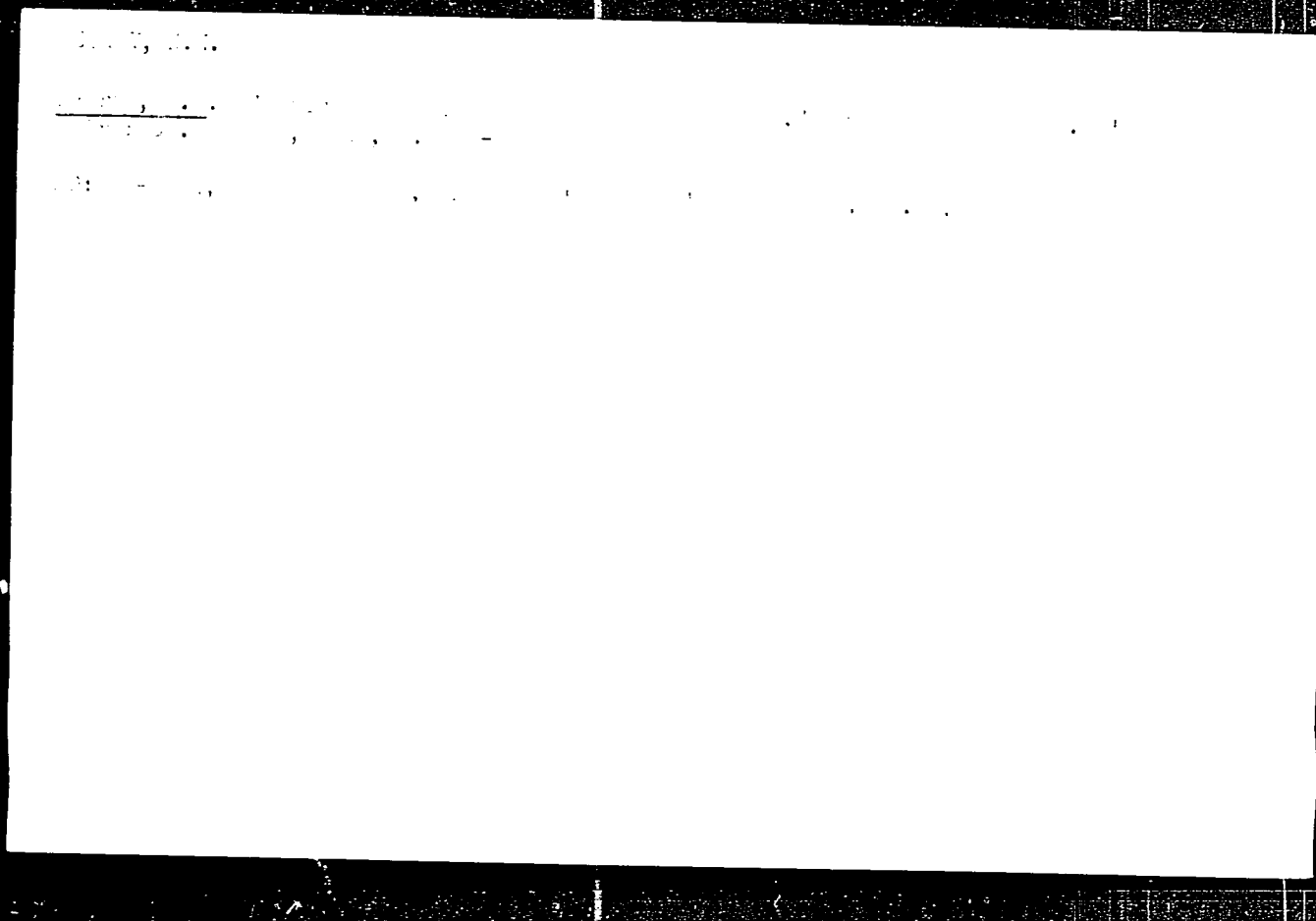
PETROV, N. N.

Petrov. N. N. "The suitability of methods leading to prophylactic treatment of cancer", Trudy Chetvertoy sessii Akad. med. nauk SSSR, Moscow, 1949, p. 137-48.

SO: U-2888, 12 Feb. 53, (Letopis' Zhurnal 'nykh Statey, No. 2, 1949 .

"APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001240510007-1



APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001240510007-1"

Петров, Николай Николаевич, 1875- ed.

Problems on problems. Ed. ed. N.N. Petrova. Moscow, 1943-
meditsinskii nauka, t. 1)

Trinity A. 194

1. Turners. I. Petrov, Nikolai Nikolaevich, 1875- ed.

PETROV, N. N.

"Stomach and Duodenal Ulcers and Their Surgical Treatment," 1949.

PETROV, N. N.

Petrov, N. N. "The prophylaxis of malignant tumors", Report to all ALL-Union ^Othe Medical Conference Leningrad, 16 January 1947, Trudy Akad. med. nauk SSSR, vol. , 1947, p. 1-17.

SO: 1-111, 17 July 1947, Leto is 'Zhurnal Vykh Stan' p. 1, 1947)

PEEROV, N. N.

"Hypothesis of the Etiology of Cancer," Khirurgiya, No.9, 1949.

PETROV, N. N., ed.

Problems in oncology

Moskva, Izd-vo Akademii med. nauk SSSR, 1971. 53 p.

PETROV, N. N.

Diagnosis

Clinical and laboratory bases for the early diagnosis of cancer., Novosti med., No. 21, 1951.

9. Monthly List of Russian Accessions, Library of Congress, April 1953₂, Unclassified.

PETROV, N. N.

Mouth - Cancer

Cancer of the oral cavity. Novosti med. no. 21, 1951.

9. Monthly List of Russian Accessions, Library of Congress, April 195~~2~~, Unclassified.
2

Petrov, Nikolay Nikolayevich
PETROV, Nikolay Nikolayevich.

[Dynamics of the genesis and development of malignant growths
in experiments with monkeys] Dinamika vzniknoveniia i razvitiia
zlokachestvennogo rosta v eksperimente na obez'ianakh. Moskva,
Izd-vo akademii meditsinskikh nauk SSSR, 1952. 16 p. (MIRA 11:1)
(CANCER)

LETRCV, N.N., KHELOIN, A.A. SOLIDOT, N.I.N.

Breast - Cancer

Clinical aspect and therapy of breast cancer. Anticancer, No. 1, 1971.

Monthly List of Russian Accessions, Library of Congress, May 1971. Unpublished.

Part IV, Ch. 1, § 1.1.

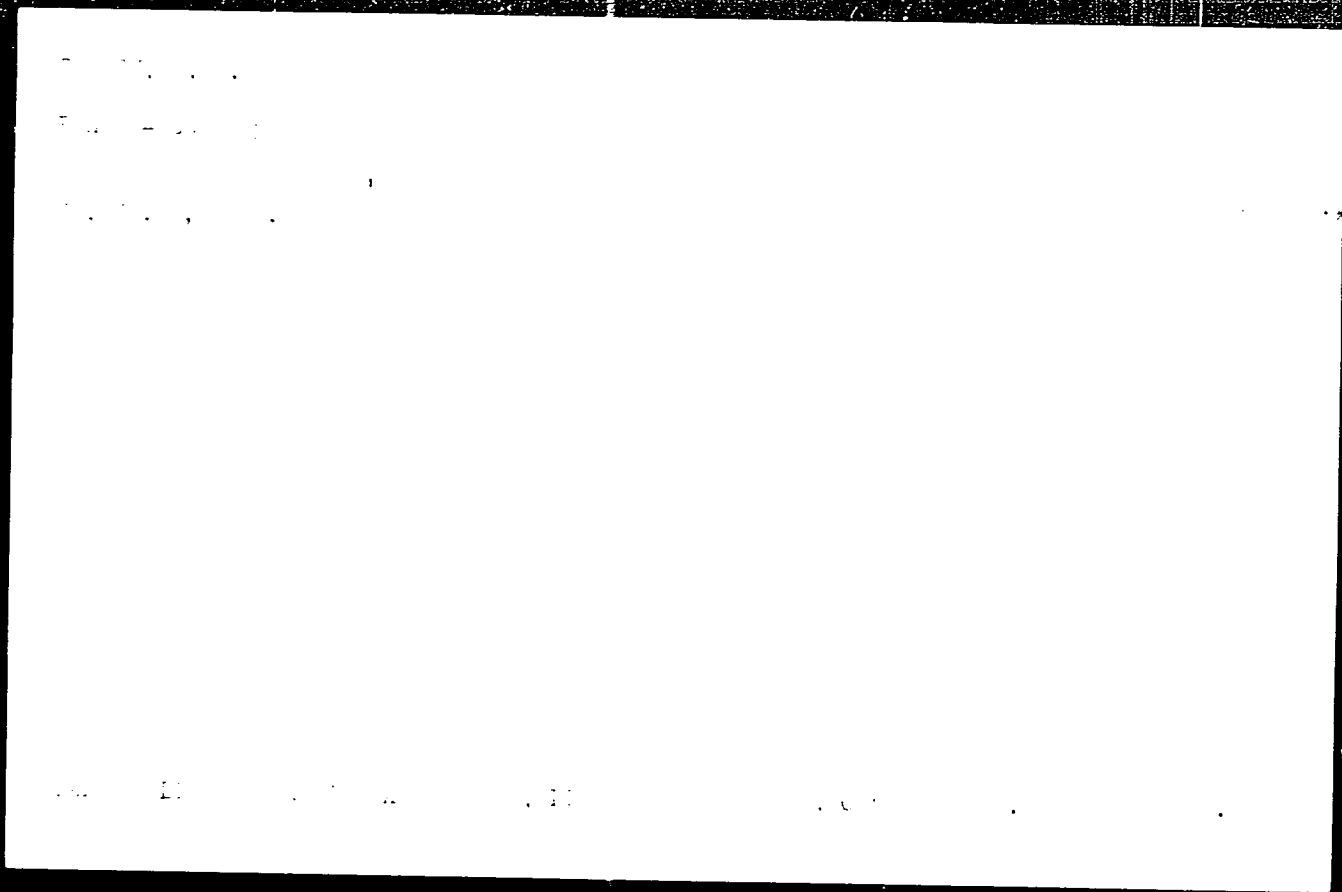
Joints--there, too

"osteointerstitial sclerosis; osteitis, osteoporosis, osteomalacia." *Journal of the American Medical Association*, 1934, 102.

[illegible]

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CIA-RDP86-00513R001240510007-1



APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001240510007-1"

HEAR, N. .

Złote łożysko w kołach Δ Kall i otoczenie. Morawa, 2. 10. 1944. Tom 2. 9. 44 n.

SC: Monthly List of Russian Accusations, Vol. 6 No. 12 March 1941.

PETROV, N.N., professor; SEREBROV, A.I., professor, chlen-korrespondent Akademii meditsinskikh nauk SSSR, direktor.

Effect of the nervous system on the growth of tumors; brief review. Khirurgiia no.3:7-15 Mr '53. (MLRA 6:6)

1. Institut onkologii Akademii meditsinskikh nauk SSSR (for Petrov and Serebrov).
2. Akademiya meditsinskikh nauk SSSR (for Serebrov).
(Tumors) (Nervous system)

PETROV, N.N., redaktor; KHOLDIN, S.A., redaktor; MEL'NIKOV, A.V., professor,
[reviewer].

Review of the book "Malignant tumors" edited by N.N.Petrov, S.A.
Kholdin. A.V.Mel'nikov. Khirurgiia no.9:80-81 S '53. (MLR 6:11)

1. Deystvitel'nyy chlen Akademii meditsinskikh nauk SSSR (for Mel'nikov).
(Tumors)

PETROW, N.N.

[Brief survey of the basic materials for developing the theory
on the growth of tumors] Kratkii ocherk osnovnykh materialov
dlia vyrabotki teorii opukholevogo rosta. Leningrad, Medgiz,
1954. 101 p. (TUMORS) (MLRA 9:5)

PETROV, N. N.

N. N. Petrov, N. A. Krotkina, A. V. Vadovaya, & E. A. Postnikovaya. co-authors of "Dynamics of the Genesis & Formation of a Malignant Growth in Experiments on Monkeys."

SO: [REDACTED]

oh

Vestnik Akademii Nauk SSSR, No 3, 1954, p 13

PETROV, N. N.

USSR/Medicine - Cancer

Jan 74

"Doubtful Points in the Theory of the Etiology of Tumors," N. N. Petrov

Byul Eks Biol i Med, Vol 37, No 1, pp 65-72

As shown by L. A. Zil'ber's results, tumors are not caused by a virus or a cancerogenic chemical agent, but transformation of normal protein into a special kind of protein under the action of a virus, cancerogenic substance, radiation, or some other irritant. Malignancy, which may develop in vitro, depends in vivo on the specific metabolism of the tissue

275T26

affected by the tumor and the interdependence between this tissue's metabolism and that of other tissues.

PETROV, N.N., professor (adres: Leningrad, ul. Saltykova-Shchedrina,
d.41, GIDUV im. S.M.Kirova)

New concept of the growth of tumors. Vest.khir. 74 no.3:3-6
Ap-My '54. (MLRA 7:6)

1. Deistv. chl. AMN SSSR.
(NEOPLASMS,
*concept of growth)

PETROV. N.N., professor.

Discussion on the detection and pathogenesis of sepsis. Vest.
khir. 74 no.8:63-66 '54. (MLRA 8:10)

(INFECTION,

diag. & pathogen.)

(SEPTICEMIA AND BACTEREMIA,

diag. & pathogen.)

PETROV, N.N., professor

"Experimental tumors of the prostate gland and hormone therapy".
B.V. Kliucharev. Reviewed by N.N.Petrov. Vop.onk.1 no.1:118-120
'55. (MLRA 8:10)

1. Deystvitel'nyy chlen Akademii meditsinskikh nauk SSSR.
(PROSTATE GLAND--TUMORS)

PETROV, M.N., professor

"Diseases preceding cancer of the stomach; methods of prevention
and early diagnosis of gastric cancer." Vop.onk. 1 no.2:105-106
'55. (MLRA 8:10)

(STOMACH--CANCER) (LEVIN, A.B.)

PETROV, N.M., professor, Leningrad, ul. Saltykova-Shchedrina, d.41, kv.1

Principles of deontology in oncological practice. Vest.khir. 75
no.5:3-7 Je '55. (MLRA 8:10)

1. Deystvitel'nyy chlen AMN SSSR.
(NEOPLASMS,
deontol. in oncol.practice)
(ETHICS, MEDICAL,
in oncol.)

ANICHKOV, N.N., akademik

Brief study of the basic materials for developing a theory on
the growth of neoplasms." N.N. Petrov. Reviewed by N.N. Anichkov.
Vest.khir.75 no.6:148-153 J1 '55. (MLRA 8:10)
(TUMORS) (PETROV, N.N.)

PETROV, Nikolay Nikolayevich, professor, akademik, zasluzhennyy deyatel' nauki;
ABRAKOV, L.V., redaktor; RULEVA, M.S., tekhnicheskii redaktor.

[Problems in surgical deontology] Voprosy khirurgicheskoi deontologii.
Izd. 5-oe, perer. Leningrad. Gos.izd-vo med.lit-ry, Leningradskoe
otd-nie, 1956. 62 p.
(MIRA 9:6)

1. Chlen-korrespondent AN SSSR, deystvitel'nyy chlen AMN SSSR (for
Petrov).

(MEDICAL ETHICS)

PETROV, N.N., VADOVA, A.V., SMOYLOVSKAYA, E.Ya., BARABADZE, Ya.M., PROZOROVA, V.S.

First experiments in inducing neoplasms with radioactive silver.
[with summary in English]. Eksper.khir. 1 no.4:3-8 J1-Ag '56

(MIRA 11:10)

1. Iz laboratorii eksperimental'noy onkologii Sukhumskey mediko-biologicheskoy stantsii (dir. I.A. Utkin, nauchnyy rukovoditel' prof. N.N. Petrov) AMN SSSR.

(NEOPLASMS, exper.

induction by radioactive silver in rats (Rus))

(SILVER, radioactive

induction of cancer in rats (Rus))

(CARCINOGENS,

radioactive silver-induced cancer in rats (Rus))

PETROV, N.N.

Basic questions on the etiology and growth of true tumors [with
summary in English] Vop.onk. 2 no.3:263-274 '56. (MLRA 9:10)
(NEOPLASMS, etiol. and pathogen.
exper. proliferation, induction by various factors)

PETROV, N.N.

"Problems in surgical deontology" by N.N.Petrov. Voen.-med.zhur.
no.9:96 S '56. (MIRA 10:3)
(SURGERY)

PETROV, N.N. (Leningrad)

Signs of the identity of so-called benign and malignant tumors.
Khirurgia 32 no.2:3-13 P '56. (MLRA 9:7)

1. Deystvitel'nyy chlen AMN SSSR.
(NEOPLASMS

symptoms of similarity of benign & malignant tumors)

PETROV, N.N., professor (Leningrad)

My advice to young surgeons. Vest. khir. 77 no.1:7-9 Ja '56

1. Deystvitel'nyy chlen AMN SSSR. (for Petrov)

(MLRA 9:5)

(SURGERY

scientific & ethical aspects)

PETROV, N.N.; Kholdin, S.A.; RAKOV, A.I.; TOBILVICH, V.P.

Basic principles and results of radical surgical treatment of tumors
of the most frequent locations [with summary in English, p.151]
Vest.khir. 77 no.12:8-17 D '56. (MLRA 10:2)

1. Leningrad, 2-ya Berezovaya alleys, d.3, Institut onkologii
AMN SSSR.

(NEOPLASMS, surg.
statist. of common types of cancer)

~~PETROV, N.N.~~ prof. geroy sotsialisticheskogo truda; PETROV, Yu.V., starshiy
nauchnyy sotrudnik

40 years of Soviet oncology. Vop.onk. 3 no.5:515-532 '57.

(MIRA 11:2)

1. Deystvitel'nyy chlen AMN SSSR (for N.N.Petrov). Adres avtorov:
Leningrad, P-129, 2-ya Berezovaya alleya, d.3, Institut onkologii
AMN SSSR.

(NEOPLASMS

oncol. in Russia, review)

PETROV, N. N. KROTKINA, N., VADOVAYA, A. V., GUMILEVICH, V. V.

PETROV, N. N.

"The Soviet Union's Military Power in the Middle East" (in Russian)
Int'l Observer "Observer", 1981, 6-12 July 1981.

GLAZUNOV, M.F.; KUZ'MINA, Ye.M.; LAZAREVA, A.P.; LARIONOV, L.F.; PARSHIN, A.N.; PETROV, N.N., prof.; PETROV, Yu.V.; RAKOV, A.I.; SEREBROV, A.I.; Kholdin, S.A.; CHAKLIN, A.V.; SHABAD, L.M.; RULEVA, M.S., tekhn. red.

[Manual on general oncology; in summary form for medical students and physicians of all specialties] Rukovodstvo po obshchei onkologii; v kratkom izlozhenii dlia studentov-medikov i vrachei vsekh spetsial'nostei. Leningrad, Gos. izd-vo med. lit-ry Medgiz Leningr. otd-nie, 1958. 366 p.
(ONCOLOGY) (MIRA 14:7)

PETROV, N.N., prof.

"Steroid homeostasis, hypophysis, and tumorigenesis" [in English]
by A.Lipschütz. Reviewed by N.N.Petrov. Vop.onk. 4 no.2:245-
246 '58. (MIRA 12:8)

(TUMORS)

(LIPSCHÜTZ, A.)

PETROV, N.N. (Leningrad, ul. Saltykova-Shchedrina, d. 41, kv. 1); KROTKINA, N.A.; BARABADZE, Ye.M.; VADOVA, A.V.; GEL'SHTEYN, V.I.; MEL'NIKOV, R.A.; POSTNIKOVA, Z.A.; SMOYLOVSKAYA, E.Ya.

Results of 13 years of work at Sukhumi on experimental carcinogenesis in monkeys. Vop.onk. 4 no.6:643-655 '58. (MIRA 12:1)

1. Iz laboratorii eksperimental'noy onkologii Sukhumskego instituta patologii i terapii (b. Pitomnik obez'yan i medbiostantsiya) (nauchnyy rukovod. - prof. N.N. Petrov).

(NEOPLASMS, experimental,

result of 18 year work on carcinogenesis in monkeys
(Rus))

PETROV, N. N., (Prof.) Honorary Member -- Leningrad

"EXperimental Study of Malignant Tumors of Bones in Monkeys."

Report submitted for the 27th Congress of Surgeons of the USSR,
Moscow, 23-28 May 1960.

PETROV, N.N.

Further observations of the monkey Tomilla after a hip amputation
in sarcoma caused by methylcholanthrene. Vop. onk. 6 no. 8:83-
84 Ag '60. (MIRA 14:1)
(CHOLANTHRENE) (FEMUR—TUMORS) (AMPUTATION OF LEG)

PETROV, N.N.

Concepts of the origin of cancer and other true tumors. Klin.
med. 38 no.1:27-30 Ja '60. (MIRA 13:10)
(TUMORS)

ACC NR: AP6036997

(A,N)

SOURCE CODE: UR/0181/66/003/011/3393/3394

AUTHOR: Makarov, V. V.; Petrov, M. N.

ORG: Leningrad Polytechnic Institute im. M. I. Kalinin (Leningradskiy politekhnicheskiy institut)

TITLE: Cathodoluminescence of single crystals of silicon carbide irradiated with fast electrons

SOURCE: Fizika tverdogo tela, v. 8, no. 11, 1966, 3393-3394

TOPIC TAGS: silicon carbide, electron bombardment, ion bombardment, cathodoluminescence, luminescence spectrum, crystal defect, exciton, electron recombination

ABSTRACT: The authors investigated the influence of electron bombardment with energy 2 Mev on cathodoluminescence of single-crystal SiC (n-type samples, $10^{17} - 10^{19} \text{ cm}^{-3}$ nitrogen atoms, and p-type $10^{18} - 10^{19} \text{ cm}^{-3}$ boron or aluminum atoms). The sample thickness was 0.2 - 1 mm and the irradiation dose was $10^{15} - 10^{16} \text{ el/cm}^2$. The luminescence was excited with an electron beam of energy up to 10 keV at a current density $10^{-5} - 10^{-4} \text{ amp/cm}^2$. The measurements were made with samples cooled to 77K. The observed spectrum turned out to be insensitive to subsequent heating and etching, indicating that the effect is produced in the entire volume of the crystal. A similar spectrum was obtained also when the crystals were bombarded with positive ions (Li^+ , K^+ , N_2^+ , H^+ , Ar^+), apart from differences in the fine structure. The results, in conjunction with earlier data by the authors (FTT v. 8, 1602, 1966) indicate that

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L 00683-66 EPT(c)/EWT(1)/EWT(m)/EWP(b)/T/EWP(t) IJP(c) GG/JD

ACCESSION NR: AP5012578

AUTHOR: Kondrashev, A. I.; Petrov, N. N.

UR/0181/65/007/005/1559/1561

TITLE: Emission of electrons when single crystals of alkali-halide compounds are bombarded with slow helium and argon ions

SOURCE: Fizika tverdogo tela, v. 7, no. 5, 1965, 1559-1561

TOPIC TAGS: electron emission, alkali halide, ion bombardment, helium, argon, field emission, forbidden band

ABSTRACT: Inasmuch as there are no published data on emission from dielectrics bombarded with inert-gas ions, and the opinion has even been expressed that field emission from dielectrics is impossible, the authors investigated the secondary emission produced when single-crystal plates of LiF, NaCl, KBr, and CsI are bombarded with ions of helium and argon with energy from 20 to 600 eV. The ion current was $\sim 10^{10}$ A. To eliminate the charge, the bombarded samples were heated to 400C and above. The results show that even at low kinetic energies of the helium ions, appreciable electron emission from the targets was observed, the largest being from KBr crystals (with increasing energy the emission increased from 0.45 to 1.8 electrons per incident ion). A correlation is observed between the emission and the width of the forbidden band of the bombarded materials, the latter being

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ACCESSION NR: AP5012578

larger the smaller the ion-electron emission. Smaller emission was produced by argon bombardment. "The authors are deeply grateful to M. A. Yermeyev for continuous interest and L. M. Zubkova for supplying the pure helium." Orig. art. has: 2 figures. 13

ASSOCIATION: Leningradskiy politekhnicheskiy institut im. M. I. Kalinina (Leningrad Polytechnic Institute) 16 21

SUBMITTED: 12Dec64 44,55

MR REF SOV: 002

ENCL: 00

OTHER: 001

SUB CODE: SS, NP

Card 2/2

23355

1/1/61

26.2312

AUTHOR

FAIR V. N. N.

TITLE

Emission from metallic targets irradiated by ions of various kinds

PERIODICAL

Referativnyy zhurnal. Fizika i Khimiya, 1961, 33, 4, 1218-1220. "Nauka", Moscow, 1961, 174 p. (English transl. "Sov. Phys. Tech. Phys.", 1961, 7, 4, 1218-1220)

TEXT

The authors studied the electron and ion emission from metallic targets (Mo, W, Ni) bombarded with ions of H^+ and Zn^{2+} . The target material and bombarding particles were selected from the following consideration: the phenomenon should be studied close to a boundary condition at which ejection of electrons must be observed at the expense of potential energy of the system, consisting of the approaching ion and a metal potential ejected. This condition looks as an inequality $eV_i \geq \phi$, where e is electron charge, V_i is ionization potential of the bombarding particles, ϕ is work function of the target. The dependence of ion-electron emission coefficient γ and ion-ion emission coefficient γ_K on ion energy E of bombarding ions were investigated. It is shown that a relative particle increase of γ with increasing E is observed in all degassed targets and metals.

21027

S/058/61/000/005/039/050
A001/A101

26.2531

AUTHOR: Petrov, N.N.

TITLE: Emission from tantalum target bombarded by ions of H_2^+ , He^+ , Ax^+

PERIODICAL: Referativnyy zhurnal. Fizika, no 5, 1961, 325, abstract 5Zh31
("Nauchno-tekhn. inform. byul. Leningr. politekhn. in-t", 1960, no 3, 53 - 52)

TEXT: The author investigated secondary emission from a Ta-target bombarded by ions of H_2^+ and He^+ having the energies up to 30 kev and by ions of Ax^+ with energies up to 7.5 kev. The coefficient of ion-electron (γ) and ion-ion (K) emissions for a gold and a hot target were measured galvanometrically. It was found out that K weakly depends on the energy E_p of bombarding ions. In the case of Ax^+ , a threshold in the region $E_p \approx 1.5$ kev for kinetic emission of electrons was discovered. A linear dependence was obtained between γ and E_p . There are 25 references.

V. Shustrov

[Abstracter's note: Complete translation.]

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21034

S/058/61/000/005/038/050
A001/A101

9.3120 (1003, 1138, 1140)

26.2531

AUTHOR: Petrov, N.N.

TITLE: A study of secondary emission from incandescent targets bombarded by ions of potassium

PERIODICAL: Referativnyy zhurnal. Fizika, no 5, 1961, 325, abstract 5Zn30
("Nauchno-tekhn. inform. byul. Leningr. politekhn. inst", 1960
no 3, 63 - 71)

TEXT: The author investigated secondary ion-electron and ion-ion emission from pure metallic targets having temperatures up to 2,000°K. To separate secondary current from thermionic emission the author employed modulation of the beam of primary ions (by sinusoidal voltage of 600-cps frequency). Secondary electrons were singled out by a resonance circuit in the target-collector chain. It was established that emission of electrons from the bombarded tantalum and tungsten targets begins at the ion energy $K^+ \sim 1.5$ kev. The coefficient of ion-electron emission γ grows then linearly with the energy of bombarding ions. The slope of the straight lines $\gamma = f(E)$ does not depend on material and temperature

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21034

A study of secondary emission ...

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A001/A101

X

of the target within the range from 1,700 to 2,000°K. The coefficient of ion-electron emission at energies exceeding 2 kev amounts to 35% and does not depend on the ion energy.

V. Shustrov

[Abstracter's note: Complete translation.]

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329 山
S/194/61/000/011/041/070
D256/D302

7, 3/20 (1003, 1138, 1160)

AUTHORS: Batanov, G.M. and Petrov, N.N.

TITLE: An investigation of metal ionic-electron emission

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika
no. 11, 1961. 3-4. abstract 11 G23 (Nauchno-tekhn.
inform. byul. Leningr. politekhn. inst. 1960. no. 9
101-107)

TEXT: The ionic-electron emission was investigated using
short single pulses in an instrument with a spherical collector and
a screen grid concentric with the collector. The instrument was
evacuated using two mercury pumps, the measurements being taken at
 $\sim (1 \text{ to } 3) \times 10^{-7}$ mm Hg. The temperature of the target did not ex-
ceed 1300°C. The metallic target was bombarded with ion pulses of
4 μ sec and of longer duration at various rates of repetition (from
single pulses to 20 per sec and more). It appeared from investiga-
ting the volt amp. curves of the instrument obtained for various

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An investigation of metal...

experimental conditions, that the coefficient of the ionic-electron emission γ can be determined from curves for two values of the collector potential. Experimental volt-amp curves are presented for K^+ ion bombardment of a tungsten target heated to $\sim 1000^\circ C$. Using ion beams modulated with fast (few μsec and less) square pulses, the time of flight of the slow secondary ions from the target to the collector approaches the duration of the primary pulse. This effect shows on the curves by a decrease in the secondary current at low positive values of the grid potential. For fast pulses a characteristic plateau was observed its width being greater for the heavier bombarding ions, e.g. greater for K^+ than Li^+ . It is obvious that the presence of a plateau can assist in obtaining a more accurate estimation of the threshold energy of the ionic electron emission. The presented data of investigation of the function $\varphi = f(t)$ for Li^+ ions show that even for ~ 1000 eV energy of the Li^+ ions the value of γ is nearly zero. Some ionic ion emission data were obtained using K^+ and Li^+ ion bombardment of a metallic

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32914

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D250/D302

An investigation of metal...

target heated to 1300°C at $E \leq 1.5$ keV the coefficient of ionic
ion emission increases with lowering E , in agreement with the re-
sults obtained by other authors. 6 references. [Abstracter's
note: Complete translation]

Card 3/3

PETROV, N.N.

Secondary emission from metal surfaces under the action of positive ions. Fiz. tver. tela 2 no.5:940-948 My '60. (MIRA 13:10)

1. Leningradskiy politekhnicheskii institut.
(Secondary electron emission)

81689

S/181/60/002/05/28/041
B004/B056

9.3/20

AUTHOR: Petrov, N. N.

TITLE: Secondary Emission From Incandescent Metal Under the
Action of Cesium and Potassium Ions

PERIODICAL: Fizika tverdogo tela, 1960, Vol. 2, No. 5, pp. 949 958

TEXT: In the first part of this paper the author describes the bombardment of a molybdenum target heated to 1200°K with Cs⁺ ions obtained from a paste (CsCl + Al₂O₃ + SiO₂), with accelerations of from

0.2 - 1.4 kv. The following experimental data are given: previous experiments concerning the dependence of the coefficient γ on the energy of the Cs ions (Fig. 1); current-voltage characteristic for 1-kev ions (Fig. 2); dependence of γ on the energy of the Cs ions (final values) (Fig. 3); diagram $\gamma = f(t)$ for 600-ev Cs ions and collector potential +140 volts and +40 volts (Fig. 4); dependence of the maximum energy of the reflected ions on the energy of the primary Cs ions (Fig. 5). The author draws the following conclusions: The data by P. M. Waters (Ref.2)

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Secondary Emission From Incandescent Metal Under
the Action of Cesium and Potassium Ions

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hold only for a target contaminated with Cs at a low collector potential; in the case of a pure target, γ increases linearly with the ion energy E between 0.4 and 1.2 keV. At $E \leq 0.2$ keV, $\gamma = 0$. dy/dE amounts to about 3% per keV. The coefficient K of the ion-induced ion emission is greater than 90% and decreases with increasing E , probably because Cs penetrates into the target. In the spectrum of the secondary ion-induced ion emission, 110-eV particles occur at $E = 1$ keV, the existence of which is explained by the simultaneous collision between Cs^+ and two molybdenum atoms. The second part of the paper deals with the bombardment of tantalum and tungsten targets with potassium ions. The ion beam was moderated by means of a 3P-2 (ZG-2) sound generator (600 c). Fig. 6 shows the dependence of the coefficient α on E for a tantalum target, Fig. 7 - for a tungsten target, and Fig. 8 shows the dependence of the coefficient K of the ion-induced ion emission on E for a tungsten target. The experiments were carried out at 1700 - 2000°K. At $E < 1.5$ keV, practically no electrons (less than 1%) are emitted. At $E \geq 1.5$ keV emission begins. Here, α grows linearly with E , and attains 24-26% at $E = 6$ keV. In the range of from 1700-2000°K, the slope of the straight line $\alpha = f(E)$ is independent of temperature both for tantalum and tungsten. The

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Secondary Emission From Incandescent Metal Under
the Action of Cesium and Potassium Ions

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values of K amount to only 2/3 of those obtained by the static method. This leads to the conclusion that thermal equilibrium between a number of particles and the lattice has been established and not been accounted for. The author mentions a paper by U. A. Arifov and S. V. Starodubtsev (Ref. 1) and thanks Professor M. A. Yermeyev for advice as well as Engineer G. M. Batanov and the students N. K. Martynova and O. I. Shumilov for their collaboration. There are 8 figures and 6 references: 2 Soviet, 3 British, and 1 German.

ASSOCIATION: Leningradskiy politekhnicheskii institut (Leningrad
Polytechnic Institute)

SUBMITTED: July 13, 1959

Card 3/3

81651

S/181/60/002/06/41/050
B006/B056

24.2100

AUTHOR: Petrov, N. N.

TITLE: The Problem of the Ion-induced Electron Emission ²¹ From Metals

PERIODICAL: Fizika tverdogo tela, 1960, Vol. 2, No. 6, pp. 1300 . 1307

TEXT: It was the aim of the present paper to explain the ion-induced electron emission from metals; for this purpose, a number of experimental investigations was carried out, the results of which are evaluated. Also the temperature dependence of the field-induced electron emission was investigated, as well as the energy dependence of γ (Fig. 1), the velocity dependence of γ (Fig. 2) and the part played by energy losses by excited electrons. The investigation of the dependence of the coefficient γ on the energy of the bombarding ions was carried out on tantalum and tungsten targets with Ar^+ , K^+ , He^+ and H_2^+ -ions. The straight line obtained for $\gamma(E)$ (Fig. 1) may be expressed by means of the formula $\gamma = \gamma_{\text{potential}} + C(E - E_{\text{threshold}})$. The dependence of γ on the velocity of the bombarding

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The Problem of the Ion-induced Electron
Emission From Metals

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ions (Fig. 2) investigated by means of Ar^+ , H_2^+ , and He^+ -ions showed a course which, like the value of the "threshold velocity" (10^7 cm/sec), agrees with the results obtained by V. G. Tel'kovskiy (Ref. 5). Fig. 3 shows dy/dE as a function of the second ionization potential ξV_1 of the atoms of those elements with the ions of which the targets had been bombarded. Fig. 5 finally shows, for the case of field-induced emission, γ as a function of $(\xi V_1 - 2\phi)$. The results obtained by the investigations are given as follows: 1) At low energies of potassium and argon ions the electron emission induced by ionic impact is lacking. The emission beginning with $E_{\text{threshold}}$ increases linearly with E . 2) The electron emission caused by the kinetic energy of the potassium and argon ions is equal and does not depend on the target material within the energy range of from 0.5 - 6 keV. 3) dy/dE increases with increasing ionization potential (cf. Fig. 3). If the curve is extrapolated, $dy/dE = 0$ at $\xi V_1 \approx 17 \text{ ev}$, which indicates that in this case the emission is very low. 4) It is assumed that in the cases under investigation bound electrons of the metal have been excited. Nevertheless,

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The Problem of the Ion-induced Electron
Emission from Metals

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it is possible that (for ions with small ΔV_i or for negative ions) one electron and one ion are emitted together. 5) In the case of high ion energies $d\gamma/dE$ decreases with increasing ion energy. 6) There is a connection between the value of γ connected with the field-induced emission and the energy necessary for the formation of the bombarding ions. 7) Between γ potential and the target temperature there is no strong connection. The author finally thanks Professor M. A. Yeremeyev for his interest and help in the investigation. N. D. Morgulis is mentioned. There are 5 figures and 22 references: 10 Soviet, 6 American, 3 German, 1 Japanese, 1 British.

ASSOCIATION: Leningradskiy politekhnicheskii institut (Leningrad Poly-
technic Institute)

SUBMITTED: July 21, 1959

Card 3/3

X

9.3/20

AUTHOR:

Petrov, N. N.

82163

S/048/60/024/06/08/017

B019/B067

TITLE:

Study of the Collision of Ions With Metal Surfaces

PERIODICAL:

Izvestiya Akademii nauk SSSR. Seriya fizicheskaya,
1960, Vol. 24, No. 6, pp. 673-678

TEXT: This is the reproduction of a lecture delivered at the 9th All-Union Conference on Cathode Electronics from October 21 to 28, 1959 in Moscow. The author studied the emission from targets of high-melting alloys to explain the processes occurring in electron emission due to ionic impact, and to determine the rules governing the phenomena. To explain the part played by the structure of the electron shell of the incident ions in the kinetic knocking-out, comparative measurements were made of secondary emission with targets irradiated with potassium- and argon ions. The dependence of the coefficient α of the kinetic knocking-out on electrons by potassium ions from a tungsten target according to Fig. 1 shows that the knocking-out of electrons occurs only at an energy of potassium ions which is higher than approximately 1.6 kev. Further investigations with

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Study of the Collision of Ions With Metal Surfaces S/048/⁵²¹⁶³60/024/06/08/017
B019/B067

W- and Mo-targets showed that in the case of an irradiation with Cd^+ -ions with energies of from 0.3 to 1 kev and with Zn^+ -ions of up to 1.6 kev, a kinetic knocking-out of electrons does not occur. The author concludes from these results that an energy limit exists for ions below which no electrons are knocked out. A similar kinetic knocking-out occurs which is independent of the different structure of the electron shell of the

K^+ - and Ar^+ -ions which in the energy range of from 0.5 to 6 kev do not depend on the type of targets (Ta, W). In conclusion, some quantum-mechanical considerations are made on the kinetic knocking-out processes. When the ion hits the metal surface its kinetic energy is reduced, and the potential energy of the colliding particles is increased. In the transformation of potential energy into kinetic one the higher Fermi levels are excited, which fact causes ion-induced electron emission. There are 5 figures and 12 references: 8 Soviet, 3 American, and 1 Swedish.

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4X

89275

S/181/61/003/001/007/042
B102/B212

26.2312

AUTHORS: Petrov, N. N. and Dorozhkin, A. A.

TITLE: Extraction of electrons from tungsten by positive ions

PERIODICAL: Fizika tverdogo tela, v. 3, no. 1, 1961, 53-60

TEXT: The effects of several factors on the ion-induced electron emission, especially those of mass and energy of ions and also of the structure of the electron shell, have not been investigated too well. The present paper is a contribution to those problems. The studies have been conducted with a mass spectrometer having a magnetic field with 90° sectors. The ion source was in one focus and the target in the other, surrounded by a spherical collector. The target was bombarded with He^+ , Ne^+ , Ar^+ , N_1^+ , N_2^+ , and Ca^+ ions. The results of these measurements are illustrated in diagrams which show the coefficient γ as a function of energy. Inert gas ions show a very distinct effect of the surface purity of the target. While the curve $\gamma(E)$ for a cold target increases rapidly as E increases, the curves obtained for a hot target show a smooth increase. In general,

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Extraction of electrons from...

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it was found that curves started with a lesser slope for cleaner surfaces. Under optimum conditions with respect to purity, the slopes of the $\gamma(E)$ curves were nearly equal for all three inert gas ions, and the curves were practically linear; γ -values were higher for heavy ions than for light ones. $\gamma(E)$ curves obtained for atomic and molecular nitrogen ions nearly coincided, and in the range of 1-10 kev they were linear. The slope of these curves decreased monotonically for higher energies; at $E < 10$ kev the inclination corresponds to about 0.135 electrons/ion.kev, which is larger than for all inert gas ions. In the case of a cold target, $\alpha(E)$ curve of calcium ions was also higher and steeper than that for a hot target (α is the ratio of target-collector current to the current of primary ions); for a high collector potential, $\alpha = \gamma$. The slope of the straight line $\lambda(E)$ for a pure target was found to be 0.073 electrons/ion.kev. The ion-induced ion emission has also been investigated. At $E \geq 3$ kev the connection between coefficient K and ion energy is very weak, and K is not larger than 10%. The maximum value of K ($\approx 2.5\%$) has been reached for calcium ions. At lower energies, K increased with decreasing E (at $E = 1$ kev, $K = 11.5\%$). All experiments have been made with tungsten targets and were found to be easily reproducible. The results are

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Extraction of electrons from...

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discussed in detail. The authors come to the conclusion that the following simple rule holds for ions of neighboring elements of the zeroth and first group of the periodic system: At $E = \text{const}$, the less electrons are ejected, the higher is the atomic number of the ion. This is not valid for ions of other groups. This can be explained by the difference of the electron shells. The less electrons are in a shell, the more energy can be transferred to each of them (at a given ion energy) and, therefore, these electrons will be ejected earlier. The authors thank Professor M. A. Yeremeyev for interest and discussions. U. A. Arifov and R. Rakhimov are mentioned. There are 6 figures and 14 references: 9 Soviet-bloc and 5 non-Soviet-bloc.

ASSOCIATION: Politekhnikheskiy institut im. M. I. Kalinina Leningrad
(Polytechnic Institute imeni M. I. Kalinin, Leningrad)

SUBMITTED: May 27, 1960

Card 3/3

PETROV, N. N.

Dissertation defended for the degree of Candidate of Physicomathematical Sciences at the Technical Physics Institute imeni A. F. Ioffe in 1962:

"Secondary Emission of Metallic Surfaces Under the Action of Positive Ions."

Vest. Akad. Nauk SSSR. No. 4, Moscow, 1963. pages 119-145

PETROV, N.N.

Some sufficient conditions for the continuous dependence of
the solution to a differential equation on a parameter. Vest.
IZU 17 no.19:26-40 '62. (MIRA 15:10)
(Differential equations)

S/046/62/025/011/002/021
B125/B102

AUTHOR: Petrov, N. N.

TITLE: Emission of secondary particles from metals under the action of positive ions

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Seriya fizicheskaya, v. 26, no. 11, 1962, 1327-1332

TEXT: This is a report on investigations carried out at the Kafedra elektroniki Leningradskego politekhnicheskogo instituta im. M. I. Kalinina (Department of Electronics of the Leningrad Polytechnic Institute imeni M. I. Kalinin). It was the aim of the studies to improve experimental conditions in order to obtain more reliable data on the ion-induced electron emission and on the reflection of primary ions from metals, and to lower the pressure of residual gases in measuring instruments. The method developed by the author for examining the ion-induced electron emission from high-melting metals can be applied to targets with temperatures of up to 2000°K. The ion-induced emission can be studied by bombarding a target with ions of alkali elements. Several

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Emission of secondary particles ...

S/O48/62/026/011/002/021
B125/B102

authors determined the coefficient γ of secondary electron emission with a "sectional collector"; the present author, however, made use of the advantages of a three-electrode device which consists of a target, a spherical collector, and an "antidynatron grid" in between. Following are the most important results obtained for the ejection of electrons by the ions H_1^+ , H_2^+ , H_3^+ , He^+ , Li^+ , N_1^+ , N_2^+ , Ne^+ , Ar^+ , K^+ , Ca^+ , Cs^+ :

The dependence of γ on the ion energy is linear if pure metals are bombarded by ions of from 1-2 up to about 10 kev. Ion-induced electron emission has a threshold energy, i.e. it is not observed at ion energies below a certain value. For targets bombarded with hydrogen ions, the curve $\gamma = \gamma(E_0)$ is non-linear, but the curves $\gamma = \gamma(v_0)$ are linear. Slow H_2^+ ions knocked out almost as many electrons as did slow H_3^+ ions. The coefficient of electron emission from metals induced by H_1^+ , H_2^+ , and H_3^+ ions of 1-20 kev in hydrogen gas remains practically unchanged when the hydrogen pressure is changed by several orders of magnitude. This holds for cold as well as for hot (1000°C) targets (Mo, W). In investigating the reflection of ions, research workers concentrate on heavy ions

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S/057/63/033/003/014/021
B104/B180

AUTHORS: Doroshkin, A. A., and Petrov, N. N.

TITLE: Ion-electron emission of some metals in the presence of hydrogen

PERIODICAL: Zhurnal tekhnicheskoy fiziki, v. 33, no. 3, 1963, 350 - 355

TEXT: The ion-electron emission from targets of tungsten, molybdenum, nickel and copper is studied under the action of fast hydrogen ions. The hydrogen pressure near the targets, which had previously been vacuum annealed, was varied between 10^{-6} and 10^{-1} mm Hg. It is shown that when these metals are bombarded with H_1^+ , H_2^+ and H_3^+ ions of up to 20 kev the electron emission is determined only by the number, of incident atomic particles, independent of whether, they form a molecule or move independently to the target surface. The ion-electron emission from Mo and Ni does not depend on hydrogen pressure between

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Ion-electron emission of ...

S/057/63/033/003/014/021
B104/B180

10^{-6} and $(4-6) \cdot 10^{-2}$ mm Hg. The emission from cold copper increased with hydrogen pressure was above 10^{-5} mm Hg. There are 6 figures.

ASSOCIATION: Leningradskiy politekhnicheskii institut im. M. I. Kalinina
(Leningrad Polytechnic Institute imeni M. I. Kalinin)

SUBMITTED, February 20, 1962 (initially)

May 9, 1962 (after revision)

Card 2/2

PETROV, N.P.; ABDULLAEV, Kh.M., deystvitel'nyy ohlen.

Structure of the Gaurdak formation in the southwestern spurs of the Gissar range. Dokl. AN Uz. SSR no. 3:10-13 '49. (MLRA 6:5)

1. Institut geologii AN Uz. SSR (for Petrov).
2. Akademiya Nauk Uzbekskoy SSR (for Abdullaev).
(Gissar mountains--Geology, Stratigraphic)

PETROV, N. P.

U.S.S.R.

Carnallite in salt deposits of southwest spur of Gissar
mountain ridge. N. P. Petrov. *Zapiski Uzbekistan
Otdel. Vsesoyuz. Mineralogicheskogo* 2, 94-103 (1961).
The usual varieties of carnallite found in a halite deposit
of central Asia are described in detail. A. P. Kalyayev

PETROV, N.P.

Lithology of the upper Jurassic salt-bearing formation in the south-western part of the Gissar Range. Trudy Inst.geol.AN Uz. SSR no.9: 196-205 1953. (Gissar Range--Rock-salt) (MIRA 12:1)

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 1, 15-57-1-746
p 118 (USSR)

AUTHOR: Petrov, N. P.

TITLE: The Conditions of Formation of a Sulfur Deposit in the
Southwestern Spurs of Gissar (Usloviya obrazovaniya
odnogo iz sernykh mestorozhdeniy v yugo-zapadnykh
otrogakh Gissara)

PERIODICAL: Zap. Uzbekist. otd. Vses. mineralog. o-va, 1955, Nr 8,
pp 105-109.

ABSTRACT: Sulfur is found in several folded structures in the
southwestern spurs of Gissar. The processes of
mineralization and the geological factors controlling
the formation of sulfur in the Gaurdak fold in Upper
Jurassic rocks are discussed. The host rocks for the
sulfur deposits consist of gypsum and anhydrite. The
sulfur accumulations occur in ore columns, lying almost
horizontally and trending in the direction of former
and present subsurface flow. The deposits also occur

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The Conditions of Formation of a Sulfur Deposit (Cont.) 15-57-1-746

in interbedded deposits, in interbed karst zones, etc. The author concludes that sulfur-bearing bodies, which formed in Quaternary time, are present in the Jurassic rocks.

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S. P. Sh.

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 1, 15-57-1-727
p 114 (USSR)

AUTHOR: Petrov, N. P.

TITLE: Utilization of the Kaolin Deposits in Angren (Ob
osvoyenii kaolinovogo mestorozhdeniya v Angrene)

PERIODICAL: UzSSR Fanlar Akad. akhboroti, Izv. AN UzSSR, 1956,
Nr 4, pp 43-48.

ABSTRACT: Primary kaolins, having formed by weathering of
porphyries, quartz porphyrites, and related tuffs in
Angren, occur in two horizons: the lower, under the
coal; the upper, above the coal. The chemical compo-
sition of the clay particles in two fractions is
given in Table 1. The cited data show that the parti-
cles smaller than 0.005 mm, obtained from the washed
kaolin in the Angren coal section No. 1, contain 38.04
to 38.92 percent alumina. The particles from 0.01 mm.

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Utilization of the Kaolin Deposit in Angren (Cont.)

15-57-1-727

to 0.005 mm consist of kaolinite. Washed kaolin in the fraction smaller than 0.01 mm is white. The kaolins occurring above the coal series were studied at the Apartak deposit in Angren by D. M. Bogdanov. The primary kaolins in Apartak (3 km to 4 km from Angren) occur in a layer 5 m to 7 m on quartz-kaolin sandstones of the kaolin series of Angren. The chemical composition of washed primary kaolins from Apartak are given in Table 2. Kaolinite forms 92 percent of the fraction smaller than 0.005 mm; the remainder is finely dispersed quartz. Washed kaolin from the upper supra-coal horizon, according to the cited analyses, is also similar in quality to the washed kaolins of the Flukhovetskoye and Prosyankovskoye mestorozhdeniya (deposits). The washed kaolin may be used in construction instead of chalk and may also serve as the raw material for manufacturing refractory bricks and porcelain.

Utilization of the Kaolin Deposit in Angren (Cont.)

15-57-1-727

Table 1

Quantity of fraction, % of particles	Chemical composition, %			
	Al_2O_3	TiO_2	Fe_2O_3	H_2O
No. 832				
0.005 mm 24.5	38.04	tr.	0.87	not determined
0.01-0.005 mm 43.5	36.67	tr.	0.64	" "

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To card 4/5

Utilization of the Kaolin Deposit in Angren (Cont.)

15-57-1-727

No. 832a				
0.005 mm 28.5	38.92	0.42	0.87	12.40
0.01-0.005 mm 16.1	36.37	0.60	0.14	12.84

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Utilization of the Kaolin Deposit in Angren (Cont.)

15-57-1-727

Table 2

Quantity of fraction, % of particles	Chemical composition, wt. %			
	Al_2O_3	TiO_2	Fe_2O_3	H_2O
No. 841				
0.005 mm 33	36.45	0.30	0.16	11.80
0.01-0.005 mm 30	29.14	0.48	0.09	10.01
0.1-0.01 mm 12	18.21	0.3	0.00	6.40

Card 5/5

S. P. Sh.

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 10, 15-57-10-14357
p 163 (USSR)

AUTHOR: Petrov, N. P.

TITLE: The Paragenesis of Sulfur and Oil (K voprosu o paragenezise sery i nefti)

PERIODICAL: Zap.Uzbekist. otd. Vses. mineralog. o-va, 1956, Nr 10, pp 35-40

ABSTRACT: In addition to sulfur and oil, the Central Asiatic fields also contain sulfuric acid, gypsum, anhydrite, celestite, barite, kieserite, alunite, loewigite, ignat'yevit (impure alunite), jarosite, boron minerals, fluorite, sellaite, volchonskoite, calcite, dolomite, aragonite, opal, chalcedonic concretions, colloidal clays, pyrite, other sulfides (of copper, lead, zinc, silver), bitumens (oil, ozocerite, etc.), and petro-
liferous water. The oil dissolves sulfur easily (up to 7 percent). Concentrations of sulfur in the oxi-

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PETROV, N.P.

Exploiting the kaolin deposit in the Angren Valley. Izv. AN Uz. SSR
no. 4: 42-48 156.

(Angren Valley- Kaolin)

(MIRA 14:5)

PETROV, N. P.

MUSIN, R.A.; PETROV, N.P., kand.geol-min.nauk, otvetstvennyy red.;
TUMASHEVSKAYA, E.S., red.izd-va; SALIMOVA, D., tekhn.red.

[Genetic types of deposits of corundum as varieties of alumina]
Geneticheskie tipy mestorozhdenii korundovykh rud kak raznovidnosti
glinosmistykh formatsii. Tashkent, Izd-vo Akad. nauk Uzbekskoi
SSR, 1957. 152 p. (MIRA 11:?)
(Corundum)

GAR'KOVETS, V.G.; ZHUKOVSKIY, L.G.; POPOV, A.I.; KOCHNEV, Ye.A.; POPOV, V...
PETROV, N.P.

Importance of facial-paragenetic dissection of series in facial-
paleogeographic, determinative, and detailed prospecting in Central
Asia. Izv. AN Uz.SSR. Ser. geol. no.1:13-16 '57. (MIRA 11:9)
(Soviet Central Asia--Geology, Stratigraphic) (Prospecting)

PETROV, N.P.

Silurian and Triassic bituminous rocks and black shales as possible
raw materials for local mineral fertilizers in the Uzbek S.S.R.
Izv. AN Uz. SSR. Ser. geol. no.1:63-75 '57. (MIRA 11:9)
(Uzbekistan--Fertilizers and manures)

ABDULLAYEV, Kh.M.; GRIDNEV, N.I.; MAVLYANOV, G.A.; PETROV, N.P.

Vladimir Ivanovich Popov: on his 50th birthday. Izv. AN 'Iz. SSR.
Ser. geol. no.2:69-80 '57. (MIRA 11:9)
(Popov, Vladimir Ivanovich, 1907)

PETROV, N.P.

Adopting the results of geological research. Izv. AN Uz. SSR. Ser.
geol. no.3:81-83 '57. (MIRA 11:9)
(Geological research)

AKRAMKHODZHAYEV, A.M.; PETROV, M.P.; CHISTYAKOV, P.A., kand.geol.-min.nauk, otvetstvennyy red.; **GRIDNEV, N.I.,** kand.geol.-min.nauk, otvetstvennyy red.; **CHERNYAVSKAYA, A.B.,** red.izd-va; **ITSKOVSKIY, M.B.,** red. izd-va; **GOR'KOVAYA, Z.P.,** tekhn.red.

[Lithology of Mesozoic deposits in Uzbekistan] K litologii mezo-
zoiskikh otlozhenii Uzbekistana. Tashkent, Izd-vo Akad.nauk
Uzbekskoi SSR. 1958. 184 p. (MIRA 11:7)
(Uzbekistan--Petrology)

AKULOV, V.V., kand.geogr.nauk; BABUSHKIN, L.N., doktor geogr.nauk;
 GRESHINA, L.M.; SKVORTSOV, Yu.A., doktor geol.-mineral.nauk;
 PETROV, N.P., kand.geol.-mineral.nauk; CHERNEVSKIY, N.N.;
 KRYLOV, M.M., doktor geol.-mineral.nauk; KHASANOV, A.S.;
 BEDER, B.A., kand.geol.-mineral.nauk; KIMBERG, N.V., kand.
 sel'skokhoz.nauk; SUCHKOV, S.P.; GLAGOLEVA, A.P.; PERVU-
 SHINA-GROSHEVA, A.N.; VERNIK, R.S., kand.biol.nauk; MOMOTOV,
 I.P.; GRANITOV, I.I., kand.biol.nauk; SALIKHBAYEV, Kh.S., kand.
 biolog.nauk; STEPANOVA, N.A., kand.biolog.nauk; YAKHONTOV, V.V.;
 DAVLETSHINA, A.G., kand.biolog.nauk; MURATBEKOV, Yu.M., kand.
 biolog.nauk [deceased]; KUKLINA, T.Ye.; KORZHENEVSKIY, N.L., red.
 [deceased]; GORBUNOV, B.V., kand.geologo-mineral.nauk, red.;
 DONSKOY, P.V., red.; YAKOVENKO, Ye.P., red.izd-va; GOR'KOVAIA,
 Z.P., tekhn.red.

[Materials on the productive forces of Uzbekistan] Materialy po
 proizvoditel'nyim silam Uzbekistana. Tashkent. No.10. [Natural
 conditions and resources of the lower reaches of Amu-Darya;
 Kara-Kalpak A.S.S.R. and Khorezm Province of the Uzbek S.S.R.]
 Prirodnye usloviia i resursy nizov'ev Amu-Dar'i; Kara-Kalpakskaya
 ASSR i Khorezmskaya oblast' UzSSR. 1959. 351 p. (MIRA 13:5)

1. Akademiya nauk Uzbekskoy SSR, Tashkent. Sovet po izucheniyu
 proizvoditel'nykh sil. 2. Chleny-korrespondenty AN UzSSR (for
 Yakhontov, Korzhenevskiy).
 (Amu-Darya Valley--Physical geography)

PETROV, N.P.; RUBANOV, I.V.; CHERNEVSKIY, N.N.; ABDULLAKHODZHAYEV, A.A.

Ilsemaninite from brown coal and kaolins in Uzbekistan. Dokl.
AN Uz.SSR no.1:17-20 '59. (MIRA 12:4)

1. Institut geologii AN UzSSR. Predstavleno akademikom AN UzSSR
A.S.Uklonskim.

(Uzbekistan--Ilsemaninite)

BATALOV, A.B.; BAYMUKHAMEDOV, Kh.N.; GAR'KOVETS, V.G.; ISAMUKHAMEDOV, I.M.;
KUCHUKOVA, M.S.; MALAKHOV, A.A.; MATSOKINA, T.M.; MIRKHODZHAYEV, I.M.;
MUSIN, R.A.; PETROV, N.P.; TULYAGANOV, Kh.T.; KHAMRAHAYEV, I.Kh.

Winner of the Lenin Prize. Uzb.geol.zhur. no.2:94-96 '59.
(MIRA 12:8)

(Abdullaev, Khabib Mukhamedovich)

AKRAMKHODZHAYEV, A.M.; KENESARIN, N.A.; PETROV, N.P.

"Lithology, paleontology, and oil and gas potentials of Cretaceous sediments in western Uzbekistan" by A.G. Babaev. Reviewed by A.M. Akramkhodzhaev, N.A. Kenesarin, N.P. Petrov. Uzb. geol. zhur. no. 5: 93-95 '59. (MIRA 13:5)

(Uzbekistan--Petroleum geology)

(Uzbekistan--Gas, Natural--Geology)

PETROV, N.P.

Geology of saline deposits in the southern part of Central
Asia. Uzb. geol. zhur. no.6:43-54 '59. (MIRA 13:6)

1. Institut geologii AN UzSSR.
(Soviet Central Asia--Salt)

IMAS, V.A.; KUDRINA, S.A.; PETROV, N.P.; RUBANOV, I.V.; SHIKIN, S.S.

Manufacture of high-voltage porcelain from Uzbekistan raw materials. Report No.1. Izv.AN Uz.SSR.Ser.tekh.nauk no.4:
30-45 '60. (MIRA 13:8)

1. Institut geologii AN UzSSR i Institut energetiki i avtomatiki
AN UzSSR.

(Electric insulators and insulation)
(Uzbekistan—Porcelain)

IMAS, V.A.; KUDRINA, S.A.; PETROV, N.P.; RUBANOV, I.V.; SHKIN, S.S.

Experiment in the manufacture of high-voltage porcelain from
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